Job: E2

Federal Aid in Wildlife Restoration Project: W-15-R **Title of Job:** 2017 Spring Wild Turkey Harvest



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The spring turkey hunter survey is conducted each year at the end of the spring season. The season closed on 31 May 2017. The objective of the survey is to obtain information on the spring turkey harvest and success. Information on age and sex composition of the harvest is also obtained and is reported elsewhere. This year's survey was available to hunters from 23 June 2017 until 10 July 2017. A full summary of hunter responses is provided in a separate report, *Spring 2017 Turkey Hunter Survey Report*.

Caveats. The spring Wild Turkey Hunter Survey samples spring turkey hunters who provided valid email addresses at the time they purchased their permit(s). As such, the sample frame may be biased and not strictly generalizable to the population of all spring turkey hunters. For the spring 2017 season, however, 66.4% of all permits sold were associated with an email address. After accounting for individuals who purchased multiple permits, 65.8% of unique, individual permit buyers provided an email address. A reminder email was sent to all non-respondents one week after the initial invitation was sent, but no further attempts were made to contact hunters who failed to respond to the survey. Therefore, results might be biased toward successful hunters, if successful hunters respond more readily to harvest surveys. However, it is likely that such biases are small given the proportion of permit buyers sampled and the response rate (see below).

Interpretations. Permit sales for the spring 2017 season were 1.90% lower than the spring of 2016. Youth permits (4,822 permits) sales fell 2.2% and regular statewide permit (28,352 permits) sales fell 1.9% compared to spring 2016 (4,932 youth and 28,899 regular permits). Youth permits continue to be a strong component of overall spring permit sales, comprising 14.5% of the total permits sold for the spring 2017 season. Spring 2017 harvest was 8.0% lower than spring 2016 harvest (22,136), with an estimated total harvest of 20,431 turkeys in 2017. Overall harvest success increased to 64.4% for spring 2017, compared to 65.7% for spring 2016. Spring 2017 success rates were above the Focus on the Future strategic plan goal for spring harvest success of 50%.

Take-home Message. Spring turkey hunters continue to enjoy a high rate of success in Nebraska, but fewer turkeys were harvested during the spring 2017 season compared to 2016, following a slight drop in the number of permits sold.

Methods. This year's survey was composed and administered in-house using Snap Survey development software (Snap v11) and Snap Webhosting service. An initial invitation to participate in the survey for the spring 2017 season was sent to 17,086 permit buyers (65.8% of unique permit buyers), but 654 were bounced back as undeliverable, giving an effective sample size of 16,432 permitted hunters. Initial invitations were emailed on 23 June 2017, and a reminder email was sent to all non-responding hunters on 30 June 2017. The survey was closed on 10 July 2017. The survey was also available on the NGPC website for hunters who did not have valid emails associated with their permits. The website survey was open over the same period as the invitation-only version. At the end of the survey period, responses had been received from 3,100 spring turkey hunters, representing 4,588 individual permits for the spring 2017 season. The raw response rate was, therefore, 18.9% and the permit response rate was 27.9%. Each survey respondent represented 7.2 spring 2017 permit buyers.

Results. Permit sales for the spring 2017 season (n = 33,174) were 1.90% lower than spring 2016 sales (n = 33,831; Figure 1). Of permits sold, 4,822 (14.5%) were youth permits and 28,352 were statewide regular permits. Youth permits sales (n = 4,822) were 2.2% lower than in 2016 (n = 4,932), and statewide regular permit sales (n = 28,352) were 1.9% lower than in 2016 (n = 28,899).

Of all unique permit buyers (n = 25,980), 78.3% bought only one permit, 15.9% bought two permits, and 5.8% bought three permits. Estimated total turkey harvest for the spring 2017 season was 20,431 turkeys. Of these, 1,862 were harvested on youth permits and 18,569 were harvested on regular statewide permits (Table 1, Figure 2). Overall, harvest was 8.0% lower during the spring 2017 season compared to spring 2016. Success during the spring 2017 season was 64.4%, with youth success lower at 41.5% and regular permit holders' success higher at 67.5% (Figure 3). Table 2 summarizes the 2017 spring season results.

TABLE 1. Spring turkey season harvest and success, 2011-2017.

					Year			
Type	Statistic	2011	2012	2013	2014	2015	2016	2017
Shotgun/	Permits	30,344	29,541	30,760	28,854	28,724	28,899	28,352
Regular	Harvest	20,237	18,884	19,040	16,707	17,378	20,143	18,569
	Success	66.7%	65.9%	61.9%	57.9%	60.5%	69.7%	67.5%
Youth	Permits	6,385	5,979	6,144	5,576	5,416	4,932	4,822
	Harvest	3,065	2,535	2,402	2,253	2,616	1,993	1,862
	Success	48.0%	42.4%	39.1%	40.4%	48.3%	40.4%	41.5%

FIGURE 1. Spring turkey permit sales, 1964-2017.

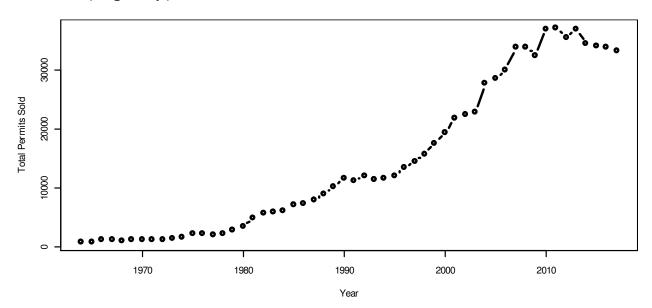


TABLE 2. Summary of spring 2017 turkey hunter survey responses and estimated harvest.

	Permit	Permits	Survey	Reported	Success	Estimated
Residency	Type	Sold	Permits	Harvest	Rate	Harvest
Resident	Youth	3,572	317	108	34.1%	1,218
	Regular	15,907	1,799	1,042	57.9%	9,210
	Sub-Total	19,479	2,116	1,150	54.3%	10,428
Non-resident	Youth	1,250	233	120	51.5%	644
	Regular	12,445	2,239	1,683	75.2%	9,359
	Sub-Total	13,695	2,472	1,803	72.9%	10,003
	Total	33,174	4,588	2,953	64.4%	20,431

FIGURE 2. Spring turkey harvest, 1964-2017.

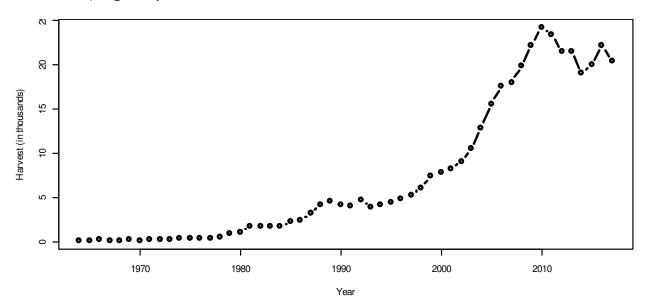


FIGURE 3. Spring turkey hunter success rate, 1964-2017. The horizontal line represents the success-rate goal established in the Focus on the Future plan (50% success).

